SURGICAL PATHOLOGY AND OPERATIVE SURGERY.

34. Excision of a portion of the ileum and the mesentery. Professor Diefienbach, of Berlin, has added to his laurels by the successful performance of this operation. We give the Professor's own account of the case as published in the Wochenschrift für die gesammte Heilkunde for June, 1836, adopting the translation

of the London Medical Gazette.

Some months since I was called upon in the morning to attend a country labourer, aged 50, suffering under strangulated hernia. I found a strongly built, powerful man, with femoral hernia on the right side. The incarceration had already existed fourteen days; and during this time, repeated but fruitless attempts to replace the intestine had been made by different surgeons. From the extended inflammation in the whole neighbourhood, added to the prolonged incarceration. I was led to expect that mortification, together with extravasation of fæcal matter in the hernial sac, had already taken place. As the skin and integument were not yet weakened, I considered the immediate opening of the sac as the first and most important step; still the unruly old man would scarcely allow me to make an examination with my fingers, much less would be consent to an operation. In addition to these difficulties, the patient being quite deaf, prevented the necessary explanations of his condition; so that I found myself at length obliged to give up all hopes of affording relief. I should, perhaps, mention that the patient had suffered, during the whole time of the incarceration, all those symptoms which usually accompany strangulation. The abdomen was tense and distended; there was perfect obstruction, and, in short, all the symptoms which would seem to threaten speedy death. Still it was matter of satisfaction to me that in leaving the patient, there appeared so little chance of success, had he consented to my operating upon him.

The following night I was again requested to visit the patient; it was with reluctance I went, because the journey promised so little success. The poor man

was now sinking fast, and the anxiety of death was evident.

The abdomen was more tympanitic than in the morning, and, indeed, the separate convolutions of the intestine could be plainly distinguished through the abdominal parietes. There was also that violent rumbling of gas in the intestines,

so often a symptom in extreme cases.

With the help of my valuable assistant, Dr. Hildebrandt, and the landlord of the house, I undertook the operation. The first step was an incision, the length of my finger, through the centre of the widely-extended and flat tumour. The cellular membrane was spotted, and firmly attached to the outer coat of the hernial sac. Upon opening the sac, there escaped a putrid mass, consisting of decomposed hernial fluid, with portions of gangrenous intestine and fæcal matter. The small portion of strangulated intestine (about the size of a plum) had an aperture in its superior surface large enough to admit the thumb. After properly cleansing and examining the parts, no fæces escaped. It was with difficulty that the forefinger could be introduced through the mouth of the sac into the intestine; and again, upon withdrawing my finger, nothing followed it. Without disturbing the adhesion of the intestine at the mouth of the sac, I made three deep incisions in the femoral ring; this also proved fruitless, and we could not produce the discharge of faces either by means of manipulation or change of position. This arose partly from the extreme narrowness of the mouth of the sac, and partly from the thickened parietes of the strangulated portion. Once more I applied some force, for the purpose of dilating the neck of the sac, but this last attempt was attended with as little success. Unwilling to let the man die without making farther attempts to give him at least some relief, I proceeded to divide the adhesions, and then drawing the intestine out until I came to the sound part, I cut out the portion that was already perforated and had been incarcerated, together with the thickened portion on each side, altogether comprising a length of about three inches. I also removed with the scissors a corresponding portion of mesenterium. One of the divided arteries of the mesenterium bleeding, I passed a ligature round it, and cut off the ends close to the knot. I did not apply torsion to the vessel, fearing that from the absence of support the vessel might untwist itself, and thus lead to unpleasant consequences. Whilst I was

thus engaged, each of my assistants held a portion of intestine between his fingers. These portions contracted so firmly, that nothing larger than a common quill could have been introduced; the extreme edges, however, were relaxed, and could be easily directed outwards. I now proceeded to join together the angular wound of the mesentery, by bringing its edges into contact by means of a continuous suture, which was composed of a very fine silk thread. I then joined the edges of the intestine by means of a separate thread, making the first stick at about two lines distance from the edge; and so, by passing the suture transversely across 'the fissure, whilst each stitch entered the muscular coat, I brought the serous coats in contact with one another, in the same manner that Lambert teaches. The mucous membrane was not at all wounded, but its edges were directed inwards, forming a wring. The intestine was now returned with the greatest care, lest in moving it the edges might be torn through. So far every thing had gone successfully, and I waited some time with the hope of an evacuation taking place. As this did not occur, I ordered some castor oil, and then went home, with the expectation of finding the patient a corpse on my next visit.

Early on the following day I found him still living, but without having had an evacuation. Strong doses of ol. ricini had been attended with no result; I therefore added ol. crotoni, and directed the patient to be raised and placed upon his feet. Immediately after this had been done, there followed some most plentiful evacuations, accompanied with the sensation of considerable relief; and such a general improvement of his condition took place, that he may be pronounced to have been no worse than he would have been had the hernia been accompanied by moderate symptoms. The abdomen had contracted after the continued evacuations, and his feelings were as favourable as could have been wished.

In this manner passed several days, during which I continued a moderate antiphlogistical treatment. An emulsion, consisting of ol. ricini, with aq. lauro-cerasi, was the only medicine I had recourse to. His diet consisted at first only of gruel; afterwards he was allowed veal broth. The condition of the patient improved daily; the only complaint he made was of hunger. He was soon in a state to take solid food without inconvenience, and his stools became quite natural.

There was a considerable secretion of pus during the healing of the external wound, but the abundant granulation showed the excellence of his constitution.

Several of my professional friends visited the patient, and took lively interest in his probable recovery. This followed so rapidly, that after fourteen days he was able to stand, and pass some hours a day in his arm-chair. The dressing of the wound was under the care of Surgeon Sierig, and was attended with such success, that in three weeks only a little scurf remained.

In the fourth week the patient was quite healed; he ate and drank as usual, and returned to his laborious field work. I did not visit him after that time,

neither did he come to me.

Some weeks subsequent to the perfect recovery of this man, I was requested suddenly to visit him; but as I was indisposed at the time, I begged Dr. Von Arnim to go in my stead. He found that the patient, after heavy labour, and an immoderate meal of fat meat and other indigestible substances, was suffering from violent pain in the abdomen, vomiting and constipation. From these symptoms, Dr. Von Arnim anticipated intussusception. Bleeding in the arm, and by means of leeches, purgatives, and clysters, was had recourse to, but without success. The pain became more and more violent, and the obstruction of the bowels remained until he died.

I was present at the sectio cadaveris, and although I felt vexed at the death of perhaps the only man living at that time who had recovered in so astonishing a manner after the excision of a portion of intestine, yet, on the other hand, it was matter of consideration to me to think that the death of the patient would explain

the mode of healing, and secure a boon to the science.

The following is the result of the post-mortem examination, conducted by Pro-

fessor Froriep with his usual care and ability:-

In outward appearance the body was well-conditioned and firm. The abdomen was very tense, and somewhat distended. Percussion with the finger gave no sign of the hollow tone distinguishing tympanitis, but, on the contrary, the dull sound which is usually heard only over the liver was extended over the

whole abdomen. In the right groin was a bluish firm cicatrix, somewhat sunk, although not drawn inwards. The navel was free from contraction inwards. Upon opening the abdomen, some reddish clear fluid escaped. As the abdominal parietes, which had been divided by a cross section, were thrown backwards, it was observed that the entire anterior portion of the cavity was occupied by the distended and extremely complicated convolutions of the small intestine, so that all the other viscera were concealed by them; a portion of the omentum only was seen emerging from the right hypochondrium, and passing obliquely over towards the pelvis, was attached in the neighbourhood of the left foramen obturatorium. Underneath this portion of omentum the intestines moved to-and-frowith perfect freedom; therefore no sort of obstruction could be caused by it. This band was then divided, and the intestines, which formed so compact a layer, were lifted up, in order to see the condition of the other parts situated more deeply.

In the right iliac region were the cocum and a convolution of small intestine, not distended as the remainder, which was firmly attached to the posterior edge of the femoral ring, and from this spet was continued a portion equally free from inflammation and distension: this passed over to the left lumbar region, where it ended in a complicated knot of small intestine, adherent to the parietes, quite

firmly united, and considerably inflamed.

This preliminary examination gave evidence of two abnormal conditions first, adhesion and intricacy of the small intestine in the left lumbar region, above which the intestine was inflamed and immoderately distended,—below it, empty, collapsed, and uninflamed; secondly, adhesion of the intestine at the inner femoral ring on the right side, where the operation had formerly been performed for hernia: still, it was nevertheless evident that the intestine was not impermeable at the seat of the operation, but at some point considerably above it, the portion of intestine lying on each side of the spot alluded to being empty. Still, great care was necessary in pursuing the investigation, as nothing could more easily occur than such a displacement of the parts as should prevent the recognition of the true cause of the obstruction.

After examining the colon, and finding that congestion and distension were only in the small intestine, I commenced at the duodenum, and continued the examination from thence downwards; its coats were thickened, and here and there upon its surface were perfectly isolated patches of coagulated fibrin. In the cellular tissue, between the serous and muscular coats was a partial serous extravasation. These signs of enteritis became more evident on the ileum, where the convolutions were in some places slightly adherent one to the other. When I got to the middle portion of the ileum, I found the colour of the intestine a dark purple red; it was distended to treble its usual volume, and covered with numerous congested and dark-looking blood-vessels. The distension was greatest in the neighbourhood of the adhesion in the left lumbar region, but it terminated suddenly at a part where another convolution of the ileum was drawn round the first like a band. The distension was not caused by gas, but by an immense quantity of fluid fæcal matter which filled the stomach, duodenum, jejunum, and ileum, as far as the obstructed spot. The obstruction was occasioned by a portion of the ileum being united, by means of false membrane, to a convolution which had evidently after this completely revolved upon its axis, so that the two processes of this convolution had twisted themselves about one another like the strands of a rope. In this situation new false membrane was produced (evident from the redness of its vessels), and thus the entire convolution was firmly united, and the constriction of the ileum made inseparable. Around the whole lay more recent patches of coagulated fibrin.

In the convolution and below it the intestine was almost empty, containing only a small quantity of pale yellow mucus, without fæcal odour, and in some parts collapsed into folds. A portion of intestine in this part, about two feet in length, and likewise empty, passed over towards the right side, across the lumbar vertebrae. Here was likewise a firm false membrane from one portion of intestine to another adherent portion: underneath this was a space sufficiently large to admit three fingers; this was empty. From this spot the intestine passed downwards into the cavity of the pelvis in many convolutions, and was closely attached to the right side; it then ascended a little, and passed immediately to the inner

orifice of the right femoral 'canal, where it was likewise firmly adherent to the abdominal parietes. As I carefully divided the pseudo-membrane in this part. between the abdominal muscles and the intestine, to the depth of from two to two and a half lines, with a scalpel, a drop of pus made its appearance; and as I wiped this away with a sponge, I discovered the end of a silk suture, which, however, was still firmly embedded: of course this proved that I was arrived at the place where the intestine had been united in the operation. This spot was firmly connected with the parietes and the neighbouring convolutions. I now opened the intestine above this part sufficiently wide to admit the little finger; this passed easily, and, indeed, directly after I passed the index finger through the formerlydivided spot there was contraction of the passage to be discovered. As I now proceeded to open this part from above downwards, the superior portion of the ileum was united with the inferior by means of a smooth cicatrix, which was only interrupted in two spots by the suture: in this cicatrix lay the suture before described as seen externally, firmly attached at the point o, and from thence its two threads passed downwards, lying in the cavity of the intestine. From this spot the ileum proceeded behind the convolutions across the linea innominata. and, after extending itself a few inches, joined the cæcum. Here we found a few hard fæcal lumps, and the pale yellow mucus before mentioned. From the anterior or outer side of the spot where the intestine had been joined, the substance of the cicatrix passed through the canal communicating with the external cicatrix.

The superior portion of the intestine is quite smooth, and has neither swelling nor fold as far as the inner smooth cicatrix, where the papilla of the mucous membrane cease. This line is about half a line wide, and below it the intestinal coats are collectively contracted into a triple fold, or projection, which is kept in that condition by the adhesion and subsequent contraction of the pseudo membrane, which lies externally, and connects this portion with the cicatrix, as before explained. Below this tumour the intestine is in every respect in its natural condition. For some little space both above and below, the intestine was connected with the peritoneum lining the anterior parietes by means of effused pseudo membrane, which is likewise in connexion with the cicatrix in the annulus cruralis.

As the remaining organs presented nothing interesting in respect to the operation, I shall take no notice of them.

35. Wardrop's Operation for Aneurism.—In an editorial article, in a recent number of the Lancet (29 Oct., 1836,) a distinction is pointed out between the operation of Brasdor and that of Wardrop, which seems justly founded, and to which we will therefore invite attention. "The three different operations for aneurism are those of Hunter, Brasdor, and Wardrop, each essentially differing from one another. Hunter's operation consisted in placing the ligature on the artery, at a considerable distance from, and on the cardiac side of, the tumour. Brasdor proposed, in such cases of aneurism of the extremities as were so situated that there was not room enough to apply a ligature on the cardiac side of the tumour, to place the ligature on the distal, or what is more technically called the "capillary" side of the aneurism. Though that mode of operating had already been proposed nearly sixty years, it had been performed only three times throughout Europe, on all which occasions it proved unsuccessful, until twelve years ago, when it was revived, and successfully employed, by Mr. Wardrop, in several cases of aneurism of the carotid, for which artery it is undoubtedly particularly applicable.

"But the operation which Mr. Wardrop afterwards proposed was founded on a totally different principle, and perfectly distinct, from the operations both of Hunter and Brasdor. Mr. Wardrop was led to perform the new operation for the cure of aneurism, by a chain of reasoning deduced from observations made on the results of Hunter's operation, and also from the phenomena observed in the spontaneous cure of aneurism. Many cases were recorded wherein Hunter's operation was successfully performed, but in which it was afterwards found that the artery on which the ligature had been placed was not sufficient altogether to prevent the circulation of the blood within the aneurismal tumour, the circumstance of a diminution in the velocity of the blood within the tumour being sufficient to permit its coagulation to take place for the cure of the disease. He further observed, that when aneurism was cured by a spontaneous process, nature

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sometimes effected her purpose, not by a complete interruption of the circulation within the tumour, but by diminishing it to such a degree as to cause its coagulation. Hence he justly concluded, that in cases of aneurism thus circumstanced. when a ligature could be placed neither on the cardiac side of the tumour, as proposed by Hunter, nor on the artery on the capillary side of the tumour, as proposed by Brasdor, a diminution in the force of the circulation, sufficient to permit the coagulation of the blood within the tumour, would be effected by placing a ligature on the capillary side of only one branch of the diseased artery. When, for instance, the arteria innominata is the seat of aneurism, and when it is impracticable to place a ligature on that vessel, either on the cardiac or on the capillary side of the tumour, Mr. Wardrop conceived that if the circulation, either through the carotid artery alone, or through the subclavian artery, could be arrested, then such a diminution would take place in the force of the circulation within an aneurism of the innominata, that a gradual coagulation of the blood would be ensured, fortifying the parietes of the tumour, and so preventing the bursting of the sac. This operation Mr. Wardrop successfully performed in the memorable case of Mrs. Denmark. The operation was afterwards adopted in a case of aneurism of the arteria innominata, by Dr. Mott of New York. The *third* case of aneurism of the innominata was similarly and successfully treated by Mr. Evans of Belper; a fourth case is now added by Mr. Fearn."

A sixth case is recorded in our preceding number, p. 329, by Dr. Morrison of Buenos Ayres. Wardrop applied the ligature in his case to the right subclavian, Mott, Key, Evans, Fearn and Morrison, in their cases placed the ligature on the

right carotid.

36. New Method of Treating Ozena and Chronic Coruza.-There are few diseases of a simple kind which are more rebellious than ozena, when once fully established. The numerous methods proposed for its cure, and the numerous cases which we daily see resisting all the means employed to combat this unpleasant malady, sufficiently prove the truth of our assertion. Ulceration of the pituitary membrane has generally been considered as the most prevalent cause of ozena; however, in many other cases, there is evidently no ulceration or breach of surface of any kind; here chronic inflammation has been supposed to exist by many practitioners; but this opinion is opposed by a great many facts, and we are compelled to admit that although chronic irritation may develope ozena, it is not the efficient cause of the disease. M. TROUSSEAU adopts an hypothesis which is sufficiently ingenious, and in accordance with several physiological facts. Many parts of the body, the feet, axillæ, &c., naturally exhale an odour sui generis, and in some individuals a very fetid smell. Whenever the parts above-mentioned become irritated or inflamed, this odour becomes still more strong, the irritation exaggerating the natural fetidity to a high degree. The same observation is applicable to the mucous membrane of the nares: in many individuals the odour of the mucus secreted in the nares is naturally strong: whenever they catch cold in the head (as it is said,) this odour increases, and reaches its maximum whenever any cause, such as ulceration, caries, &c., keeps up a permanent fluxion of the nasal mucous membrane. According to this idea ozena may be defined, a peculiar odour of the nasal mucus, which is in general occasioned by a chronic fluxion of the olfactory mucous tissue.

The tenacity of inflammations which attack the mucous membrane of the nasal fossæ has been remarked by all physicians, though nothing is more easy than to combat them by topical means when they effect only the entrance of the nares; hence the obvious conclusion that the difficulty of the cure depends upon the difficulty of carrying our remedial means immediately to the seat of the

disease.

The inspiration of medicated vapours presents the most complete means of applying a substance to the whole surface of the nasal fosse, but is accompanied with the great inconvenience of acting on the lungs at the same time; hence we are compelled to have recourse to insufflation or injection; and of all remedies, experience shows the mercurial preparations to be the most efficacious. We may employ the protochlorure or the deutochlorure of mercury, indifferently, after the following formulæ:

Re Protochlorure of Mercury 24 gr.; Red Oxide of Mercury, 12 gr.; Sugar-candy powdered 3 1.

B Deutochlorure of Mercury D ij; dissolve in sufficient alcohol, and add distilled water z xij. The patient must inspire strongly a pinch of the powder, and repeat it five or six times a day, or mix one or two spoonsful of the solution in a glass of warm water and inject. By this simple method M. Trousseau has succeeded in curing several cases of ozena and chronic coryza.—Lancet, from Journal des Connaissances Médico-Chirurgicales, May, 1835.

37. Treatment of White Swellings by muriate of Barytes .- In the Gazette Médicale de Paris of 2nd April, 1836, there is a report of a clinical lecture of M. Lisfranc's, containing the results of this eminent surgeon's experiments with the muriate of barytes in white swellings. This medicine has recently been brought into notice, or rather attention revived to it by Dr. Pirondi, of Marseilles. It is administered in the following manner. Six grains of the salt are dissolved in four ounces of distilled water, of which one spoonful is taken every hour, except one hour before and two hours after each meal. In order to tolerate the medicine, the patient must abstain from wine and meat, taking only water and vegetable food. The bottle should not be exposed to the sun, or the salt will be precipitated, and the last spoonsful contain a greater quantity; to avoid this, it should always be shaken. Sometimes the medicine produces slight pain in the stomach, or a feeling of weight; but if other symptoms do not follow, the stomach gradually becomes accustomed to the remedy, and the pain ceases. If, on the other hand, nausea, vomiting, or even some slight symptoms of poisoning come on, the medicine should be suspended, and cautiously resumed. The climate has some influence; for, although at Marseilles two drachms have been given, M. Lisfranc has never been able to increase the dose in Paris beyond forty-eight grains, and often he has been unable to reach that. The unpleasant symptoms have been removed by whites of eggs. Numerous patients have been submitted to this treatment, and the following are the conclusions which M. Lisfranc has arrived at.

1. Generally the white swelling has been much amended, and sometimes cured. 2. The benefit has been greatest amongst the scrofulous. 3. In some very few cases the muriate alone has cured. 4. After a certain time, the disease having become stationary, it was necessary to employ another method. At a later period, the renewed use of the muriate has produced excellent effects. 5. It may be employed both in the acute and chronic stage of white swellings. 6. Serious accidents have never resulted from its use; the slight symptoms before mentioned have always yielded readily. 7. A frequent effect is a diminution in the frequency of the pulse; this falling from sixty or eighty to forty or fifty, or even to twenty-five. 8. In some circumstances the medicine, continued at the dose of twelve grains during the month, has produced as much amendment as in other cases where the dose has been gradually augmented. 9. Where the pa-tients have been slightly inconvenienced with the medicine, it has been most useful. 10. Compression and local abstractions of blood have been often combined with this treatment, and with extreme advantage.

M. Lisfranc regards the muriate of barytes administered as recommended by Pirondi as a valuable acquisition to surgery.

' 38. On the Cure of Intestinal Fistula by the Actual Cautery .- The success attending the employment of the hot iron in the cure of artificial anus, already recommended by Deiffenbach, is confirmed by two cases related by Dr. FINGER-HUTH.

In both, abdominal inflammation, caused by violent blows, had been followed by external abscess, to which succeeded discharge of fæcal matters. Various cauteries were employed to destroy the membranes lining the fistulæ, and to convert them into granulating surfaces, but without producing their complete obliteration. The fistulous openings, although somewhat diminished by imperfect granulations, showed no tendency to become closed. Cauterization was then adopted by means of an iron, corresponding in diameter to that of the fistulæ, and the temperature of which was scarcely elevated to that of red heat. Luxuriant granulations soon covered the cauterized parts, the fistulæ diminished, and the surfaces being again destroyed by a heated from corresponding in size to the apertures which remained, they were eventually cured.—Dublin Journal, 1837, from Wochenschrift für die gesammte Heitkunde, No. 6, 1836.

39. Dislocation of the femur upwards and forwards on the pubis.—A case of this intrequent accident was admitted into the Glasgow Royal Infirmary. The subject of it was a woman aged 24, in the eighth month of utero-gestation. Eleven hours previous to admission, on going down stairs with a large vessel of water in her hand, her right foot slipped, and, to recover her balance, she threw her body violently backwards, and fell on her right hip. She was unable to rise or to make any use of the limb, which was shortened one inch, and permanently everted. Adduction and rotation outwards could be partially performed, but attempts at adduction or rotation inwards, were productive of acute pain. The globular head of the os femuris was distinctly recognised on the pubis, and was seen as well as felt to move in unison with the shaft of the bone. The nates of the injured side was flattened, and there was a distinct hollow in the situation of the acetabulum.

Reduction was easily accomplished by Dr. Macfarlane. She was placed on the left side in bed; a broad sheet was passed between the thighs to fix the pelvis; extension was applied above the knee, and in less than two minutes, the head of the bone was felt to move, when, on sudden rotation inwards, reduction was effected. She left the house in about a week quite well.—Edinburgh Med. and

Surg. Journal, Jan. 1837.

40. New operation on the urethra and prostate.-Mr. Costello at the meeting of the Westminster Medical Society of the 4th of February, 1837, stated that he had that day performed the operation of scarifying the urethra and prostate gland; and as the operation was as simple as leeching, and far more efficacious, he would shortly state the process, and the accident which first brought it under his notice: -Upon one occasion he was engaged in performing lithotrity upon a patient 73 years of age; the bouton de sureté upon the instrument which he employed, had been carelessly made with sharp, cutting edges; and, upon withdrawing the instrument, he discovered that it had scarified the passage of the urethra and the covering membrane of the prostate gland, so as to cause hemorrhage from these parts. Though somewhat startled at the occurrence, he was glad to find that no unpleasant consequences arose, but that the bleeding had removed the pain, irritation, and sense of weight which previously existed. Upon reflection it struck him that an instrument might be made to relieve the turgidity, which formed so unpleasant a symptom, by scarification; and he had since employed the operation in several cases with far more benefit than he had ever seen follow the use of leeches. The quantity of blood obtained in this way could be increased to 4 or 5 ounces, by placing the patient in a warm bath immediately after the operation. It was worthy of remembrance that the incisions gave rise to little or no pain, as was generally the case in cutting internal organs.

At a subsequent meeting of the society, (February 25th,) Mr. C. exhibited the instrument employed by him for scarifying the prostate and urethra. It consists of a silver catheter of the ordinary size, in the tube and extremity of which his fixed a small double edged probe-pointed blade. When the catheter is introduced into the prostatic part of the urethra, this cutting part can be thrust out and drawn back by its attachment to the stilette of the catheter; the extent of the protrusion being regulated by a screw. [The safety of this means of local depletion will have, we conceive, to be established by further experience.]—British

Annals of Medicine, Feb. 10, and March 3, 1837.

41. Section of the tendo achillis in the treatment of club-foot.—This operation was first performed under the direction of Thilenius in 1784, and has been since repeated by Sartorius, Michaelis, Delpech and Stromeyer. Two cases successfully treated by the latter surgeon by this means were noticed in a preceding number, (November 1834, p. 247.)

M. Bouvier has recently communicated to the Academy of Sciences of France a memoir on this subject, in which he relates three cases successfully operated on

by himself and one by M. Roux, and two others which he has still under treat-

The operation of M. Bouvier differs slightly from that of Mr. Stromeyer. He introduces under the skin covering the tendon a needle with a cutting edge, by means of which he divides the tendon entirely, cutting from the cutaneous surface towards the bone. The external puncture, which is scarcely apparent, soon heals. The foot is drawn in a few days to its natural position; and the re-union of the tendon takes place in a few weeks without the occurrence of the least inflammation.

This process is principally applicable to those cases of club foot, called pied equin, which have been of long standing, and in which the employment of machines is often insufficient and even dangerous.—Journal Hebdomadaire 17th of September, 1836.

42. Painful crepitation of the sheaths of tendons.—The Gazette Médicale of 20 June, 1835, contains an interesting memoir by M. Poulain, on this affection.

Boyer was the first who called attention to this complaint, but he spoke of it so cursorarily as to obtain for it but little notice. Velpeau, in 1818, described it very precisely, and since that period, various accounts of it have been published; but as it has not yet found a place in any surgical work some account of it may prove interesting.

The wrist and ankle joints, as every one knows, are surrounded by a number of tendons, many of which are furnished with peculiar aponeurotic sheaths, confounded above and below with the fibrous envelope of the muscles of the limb. These aponeurotic sheaths are the seat of the disease of which we speak; in most cases it is produced by forcible and long-continued tension of the tendons themselves; at other times by external violence; it is also most frequently seen in persons whose trade requires violent flexion or motion of the wrists and fingers,

as in washerwomen, locksmiths, masons, wood-cutters, &c.

The principle symptoms are, a swelling, of variable form and dimensions, along the affected parts; pain and redness of the skin, and particularly a crepitation, which sometimes resembles that of fracture so closely that the best surgeon may be mistaken in his diagnosis if he pays too much attention to this latter symptom. The swelling, which rarely exists to any considerable extent, is usually very sensible, but in some few cases so slight as not to be perceived without a minute examination. The pain is most slight when the limb remains at rest, but is always augmented by motion of the limb, or whenever the surgeon presses upon the part, or communicates any motion to the inferior extremity of the limb; the tumour also is usually prolonged a little along some one of the aponeurotic sheaths, but no deformity whatever of the member can be observed. But the most important symptom, in fact, the pathognomic sign of the disease, is a crepitation generally resembling that heard in the first period of pneumonia, but on some occasions sufficiently strong to be mistaken for the noise produced by rubbing together the two fragments of a broken bone; it is, however, in general, much more feeble, and, according to M. Velpeau, resembles the sound produced by walking in a hoar-frost, or over snow when it has frozen. The only disease with which the affection we now speak of is liable to be confounded, is the straining of the ligaments about a joint or a fracture. In some of the former cases we find a kind of crepitation, and it is highly probable that here the two diseases coexist; besides, any error cannot be of practical consequence. Fracture of the inferior extremity of the radius has, it would appear, been frequently confounded with the tendinous crepitation. It was upon an occasion of this kind that M. Velpeau had first an opportunity of remarking the affection. It occurred at the Hospital of Tours in 1818:-

A young cabinet-maker came to the hospital to have the splints arranged which a surgeon had applied for supposed fracture of the radius. On removing the dressings, M. Velpeau wished to ascertain the existence of the fracture, and on moving the thumb was soon convinced that the crepitation alone had given rise to the idea of a fracture, which did not exist. However, a careful comparison of the symptoms will in a great majority of cases suffice to prevent any error. As crepitation of the tendinous sheaths is a slight affection, and constantly is re-

moved by rest, compression, and the use of resolvent applications, no opportunity has as yet occurred of ascertaining its exact seat, which is probably in the syno-

vial membrane, and not in the fibrous tissue itself.

The treatment of this disease is sufficiently simple. When the pain is considerable, and joined with some redness of the skin, it is natural to apply leeches antiphlogistics do not seem to have much effect. The most successful treatment consists in the application of a roller round the swollen part, drawn moderately tight, and moistened with some camphorated spirits of wine, or any other resolvent; by this means the swelling, pain, and crepitation, generally disappear in a week or two.

This affection, though one of frequent occurrence, has not, as far as we remember, been made the subject of any communication in any of the English or American periodicals. M. Velpeau cites from twenty-five to thirty examples, which he has already met with in the sheath of the peritoneal muscles, extensors of the thumb, radial extensors, and extensors communis digitorum; and cases are now to be seen daily at the consultations of all the hospitals. In two cases treated by M. Velpeau in 1831-2, the disease terminated in a fungous degeneration of the tendinous sheaths of the phalanges.

- 43. New method for the operation for aneurisms.—An Italian surgeon, Dr. Sarra, has proposed a new operation for the cure of aneurisms, which he terms mechanical obliteration. It consists in making a longitudinal incision in the artery through which a cylinder of gum elastic, about two inches, is to be inserted. We need not give further details for the operation, as no one, we presume, is likely to put it into practice.—Gaz. Méd. de Paris, 10th Sept. 1836, from Osservat. Medico.
- 44. Lithotrity performed on a child. M. Segalas exhibited to the Academy of Medicine at their meeting on the 4th October last, a child, who, at the age of two years, exhibited symptoms of stone. When thirty-three months old, Mr. S. operated on him by lithotripsy, and in six operations, performed during a period of six weeks, the patient was perfectly cured. This is the youngest child as yet subjected to the operation. The stone was eleven lines in diameter.—Journ. des Connaiss. Med. Chirurg. Dec. 1836.
- 45. Chronic Vessical Catarrh treated by injections. M. Duvergie, Senr., lands the powers of balsam copaiba administered by injections into the bladder for the cure of catarrhus vessicæ. He employs it in doses of from I drachm to 2 ounces mixed with barley water. He recommends that emollient injections should first be made with a graduated syringe, in order to ascertain the capacity of the bladder, and its degree of irritability. When this organ is very irritable, he combines narcotics with the balsam. The following is his prescription—B. Laudanum 3j.: Bals. Copaib. 5ij.; Decoct. Hord. \(\frac{3}{2}\)ij. The whole, or half this quantity, is injected into the bladder, and allowed to remain 10 or 15 minutes or more. If this does not produce too much excitement, the quantity is gradually increased, and the injection is allowed to remain longer in the bladder. If the bladder is extremely irritable, emollient injections must be first used, then opiates added, and finally the balsam. The emollient and narcotic injections should be renewed three, four, or five times a day; the balsamic daily, or once in two days. Ten cases are related in which this treatment was pursued.—Gaz. Med. de Paris, 1 Oct. 1836. [This remedy was, we believe, first proposed by Dr. Soucher, of Romans, (Annales de la Med. Phys.) and was successfully employed by him in one case.]

Case of compound dislocation of the astragalus and os naviculare.—Mr. C.
 Burnerr relates in the Lond. Med. Gaz. (12 Nov. 1836) the following interesting case.

Golonel G— is an active man, of a spare habit of body, upwards of 60 years of age. On the 23d of February last he was fox-hunting, and had made a leap, when suddenly he found himself unable to follow, in consequence of his right foot being displaced. His usual habit was to ride in his stirrup, the foot resting on its outer side. When I first saw him the boot had been removed, which from the force of the injury, had given way, the bone protruding through it. The foot was dislocated inwards, at right angles with the leg; and two bones were plainly to be

seen projecting out of a wound, which was about three inches in length, extend-

ing across the outer ankle.

"I carefully examined the situation and shape of these bones: the upper one, the os naviculare, had projected its cuneiform surface outwards and forwards, in an oblique direction; and the other bone was the astragalus, which had forsaken its natural cavity, was driven forwards and outwards, and presenting that surface which in its natural position would be in contact with the os calcis. I steadily kept pressure as firmly as I could, for nearly a quarter of an hour, upon the prominent os naviculare, in the direction of the joint, to which I was directed by the end of the tibia, which was plainly to be seen beneath the astragalus. At the expiration of this time I had the satisfaction to see the bones slip into their proper places, and the foot resume its natural character. The end of the fibula was not fractured. Having placed the limb in proper splints, I conducted him home, where he was met by his family surgeon, Mr. Wickham, of Winchester, in whose able hands I had every satisfaction in knowing it would be watched with an active and intelligent eye. The case has done remarkably well; and by a letter which I have received from Mr. Wickham, he tells me—"I am able now to inform you that Colonel G——'s case has been brought to the most satisfactory termination. The wound is healed, the motion of the joint is perfect, and the swelling of the part is nearly reduced. Weakness, which time only can remove, and the occasional puffiness from use, are the only remaining effects of the injury. You are aware that the progress of the case has scarcely been interrupted, and that inflammatory symptoms only once occurred during the period of his confinement; these were ushered in by a rigor and succeeding heat; they occurred about three weeks after the accident, and only lasted a few hours. At present he is able to walk with crutches, without the least inconvenience, and the limb bears occasionally its share of the weight of the body. As to the motion of the joint, it cannot only be performed by myself, but he can freely bend and extend the foot."

47. Ligature of the subclavian artery.—Dr. Philip Montani, chief surgeon of the military hospital of Capua has recorded in the Osservatore Medico a case of traumatic aneurism of the axillary artery successfully treated by him, by the application of a ligature to the subclavian. The case offers no particulars of special interest, but the instances of ligature to the subclavian are sufficiently few to render the fact worth recording.

48. Observations on the nature and treatment of Ganglion. By Aston Key. The power which tendons have of forming bursal cysts, when they are exposed to extraordinary pressure or friction, is one among the many resources possessed by organized structures, to prevent the occurrence, as well as the consequences, of inflammation. It would seem that ganglia are not merely diseased bursæ mucosæ; for the former are found in parts where, in a state of health, bursæ do not exist. I look upon them as new structures, formed upon tendons, as pressure or friction, or undue exercise of a part, may call them forth. On the patella the presence of a bursa is accidental: it is not always met with in dissection; and probably its formation may depend on the exertion which the ligamentum patellæ has to undergo, or the pressure which it may have to sustain, in the frequent act of kneeling. The contents of a ganglionic tumour differ from those of a common bursa mucosa. The latter secretes a fluid like ordinary synovia, for the purpose of lubricating the tendon: the ganglion most usually contains a substance like the outer layers of the crystalline lens, soft, viscid, and nearly solid. These crystalline ganglia, as they might not improperly be called, are frequently formed about the hand, especially on the extensor tendons, as they pass over the carpal bones; less frequently on the lower part of the theca containing the flexor tendons of the fingers, forming small but sensitive swellings near the metacarpus. They also are occasionally seen on the extensor tendons of the fingers where they pass over the joints, giving pain, and accompanied by a great sense of weakness in the part.

These crystalline ganglia are formed, as I have said, on the tendinous structure, and appear to consist of a double bag: the outer one tendinous and firm; the inner, like a synovial membrane, thin and secreting. In one that I examined on the tendon of the external gastrocnemius muscle, this double bag was distinctly seen. In most instances, the outer cyst cannot be separated from the inner; the whole

seeming to be made up of one fibrous bag, secreting on its inner surface.

The treatment usually adopted for those situated on the back of the wrist-joint, is, to burst the cyst by a sharp blow with a book or any other hard body. If well aimed and sharply struck, it often effects the object of breaking it down; but it as frequently fails, either from the firmness of the cyst or from the mskilfulness of the blow, or from want of sufficient resistance afforded by the wrist. It is also a painful remedy, and is occasionally productive of more subsequent inconvenience than the ganglion had occasioned. The more simple plan is, that of making a small puncture with the point of a lancet; or a cataract needle, when the tumour is small. There is no fear to be entertained of inflammation taking place; as the cyst is little disposed to inflame, and the closure of the opening, after the contents have escaped, by means of a band or piece of plaster, is a sufficient guard against its occurrence. I have never seen or known any mischief to arise from the operation of puncturing these ganglia; and their return is as equally prevented as by any other mode of treatment.*

For the small tumours that occupy the base of the palmar side of the fingers, the puncture is the only remedy. Blisters or blows are ineffectual: the former are very slow in operating, and rarely succeed in removing them; and blows cannot be struck with sufficient accuracy to ensure a rupture of the cyst. The cataract needle is the most convenient remedy: the tumour being sensitive, the patient experiences some pain in its introduction; but it is momentary, and the relief afford-

ed is complete.

When the swelling is situated over the back of a joint on the extensor tendon, pressure should be kept up for some weeks after the evacuation of the cyst. A gentleman, who was much in the habit of writing, applied to me for a swelling of this kind on the first phalangeal joint of the right index: he complained of pain and weakness in the use of it, and was unable to employ the finger steadily in writing. A small puncture was made in it, and about a drachm of crystalline fluid escaped: a piece of riband was bound over the joint, and firm pressure was thus made on the cyst. The fluid did not collect again; and by wearing the ribard for a few weeks, in order to secure and steady the finger when employed in writing, he regained the perfect use and strength of it.

I once punctured a similar swelling over the tendon of the trochlearis superior muscle of the eye; and it never shewed any disposition to return. Occasionally, the part that has been the seat of the ganglionic enlargement becomes thickened after its contents have been allowed to escape; and a slight hardness remains, but

does not interfere with the use of the part.

The ganglior patellæ is a cyst formed upon the expanded tendon that invests the surface of the patella. Its structure resembles that of the other ganglions, having a dense fibrous covering lined by a secreting membrane. The secretion differs from that of the crystalline ganglia, in being fluid; probably in consequence of having less albumen in its composition. I need not enter particularly into the ordinary modes of managing such ganglia, when they become large or painful. Blisters, stimulating plasters, and pressure with a bandage, are often resorted with advantage. The more effectual plan for dispersing them altogether, is, to puncture them with a lancet, to let out the contained fluid, and to employ firm pressure with a bandage and plaster. If this does not prove permanently successful, the seton becomes the most ready, the most mild, and the most effective remedy that we have at command.

I have frequently had occasion to employ this remedy for this affection of the knee; and can aver it to be milder in its effects, and in the annoyance it causes the patient, than the common blister. If a few threads be passed through a ganglion patellæ of one knee, and a blister applied to another on the opposite limb, the patient invariably, I have noticed, complains of more suffering from the blistered surface than from the suppuration caused by the seton: and this is in accordance with what we know of the sensitiveness of the skin, compared with the sensibility of a bursa, even in a state of inflammation. The pain complained of during the stage of acute inflammation is inconsiderable; and the moving the

^{*} The best mode of puncturing ganglions, is probably that recommended by M. Chailly, see vol. xix. p. 257, of this Journal.

threads, during the process of suppuration, occasions but little uneasiness. Sometimes a little feverish excitement is produced by the pus not escaping freely from the apertures, which, being retained, becomes decomposed: this inconvenience is remedied by keeping the openings, where the silk enters, free and clear. The seton should be kept in for several days after suppuration is established, in order to promote granulations, and to facilitate the escape of the pus. Even where the ganglion suppurates itself, the seton may be used with advantage, towards accomplishing these two objects.

The detail of cases in which the seton was employed is unnecessary, as they resemble each other in all points of practical import. The length of time required for the complete action of the silks, and the extent of the inflammation induced by them, may vary in different individuals. Many cases have occurred in the hospital, during the last three years, in which the seton has been employed; and, on the whole, I prefer it, as being more certainly effective, and combining with

such efficiency the advantage of not being severe or painful.

It is not to the ordinary ganglion patellæ alone that its use is confined. The operation of the seton is more especially adapted to the indurated ganglion. By this kind of swelling, I mean one in which, from the continued existence of inflammation, the cyst of the tumour has become exceedingly thickened by successive deposits or layers of adhesive matter or fibrine, converting the tumour into an

These hardened ganglia cause great uneasiness to the subject of them; and incapacitate the person from bearing on the part in kneeling, as well as weaken the limb in the act of extension. The appearance of these tumours, when they are laid open, sufficiently indicates their manner of growth, and also the mode in which the loose bodies, resembling melon seeds, that are often found mixed with

their fluid contents, are produced.

The operation usually employed for the care of such indurated cysts on the patella and its ligament, is excision of the entire mass. The operation is easily performed, does not involve the joint in danger, and is effective in removing the disease. When the tumour is small, the operation is quickly performed; but if it be large, and overlap the synovial membrane, a surgeon cannot divest his mind of all risk of wounding the capsular ligament, especially if the base of the cyst be adherent to the subjacent fascia; and the operation requires some cautious dissection. Fortunately, the seton is equally successful in promoting suppuration of the cyst, as it is in the smaller and soft ganglia. But the most gratifying result is the entire disappearance of the hardened coats of the cyst by absorption. The indurated parietes appear to be produced, and to be kept up, by the irritation of the bag; which being filled up by the inflammation and suppuration established by the seton, ceases to act as a cause of irritation, and the absorbents set to work for the removal of the walls of the tumour .- Guy's Hospital Reports, No. III.

49. On the employment of Kreosole in Cancer and Lupus. By J. R. Cormack. -Reichenbach, Graefe of Berlin, Cloquet, and others to be noticed, state that they have employed it with great advantage. Graefe in his surgery gives a case of very extensive cancer of the face and palate which was much improved by kreosote; and M. Breschet announced to the Academy of Medicine in Paris, during last year, that he had employed this remedy in a case of cancerous ulceration of the nose, in the Hotel Dieu, with great benefit. M. Tealier applied a saturated solution of kreosote in water to an open cancer situated in the breast of a woman, who was suffering most excruciating pain from it, and it was with a view of alleviating this that he employed the kreosote. The result is interesting. No sooner had the solution come in contact with the ulcerated surfaces, than the patient complained of an acute burning pain in the sore, shooting through the right side of the chest, and extending from the head to the very tips of the toes. This continued for an hour, after which the pain entirely ceased, and the patient enjoyed uninterrupted sleep for ten hours. Subsequent applications uniformly allayed the pain, and under its use the sore assumed a more satisfactory appearance. The same gentleman has used it in various affections of the neck of the uterus. In one case he applied a mixture of one part of kreosote to three of water to an ulcer in that situation. The pain which was immediately produced was of such a nature as to cause the woman to toss about in bed like one in convulsions. To alleviate her sufferings, he ordered injections of cold water, but the pain did not wholly leave her till the second day, when she was quite free of it, which had not been the case for two months before. The kreosote was continued, but was afterwards used in a less concentrated form, and the patient was doing well, when he reported the case to the Societé de Medecine of Paris. These cases are interesting reported the case to the societie at measure of Paris. These cases are interesting from the remarkable effects immediately produced, but are of little importance in enabling us to decide upon the value of kreosote as a remedy in cancer, from their imperfect state. M. Marchal has published a case of cancer of the lip, in which he believes he accomplished a perfect cure by means of kreosote. The ulcer had all the external appearance of cancer, and was attended with the lancinating pains so characteristic of that malady. Besides applying to its surface lint soad, and in pure kreosote, he occasionally touched it with caustic; and under this treated in pure kreosote, he occasionally touched it with caustic; and under this treatment the sore cicatrized, and the lancinating pains ceased. M. Marchal suggests the probability of the caustic inducing the ulcer more readily to take on a healing action under the use of the kreosote, but ascribes to the latter the chief merit of the cure. He states that the application of the pure kreosote occasioned at first very acute pain, and this is the most common occurrence, though it is byno means uniformly to be looked for. In consequence of reading the above case of M. Marchal, I was induced to try the effects of the application of pure kreosote in lupus of the nose. The size of the affected part was rather less than half a six pence, and had been very slowly increasing for about three years. Upon applying kreosote to this surface, the patient experienced no uncasiness. For about a week it was dressed with lotions of kreosote water, and from time to time touched with undiluted kreosote. For a day or two no change seemed to take place; but after this, the parts surrounding the sore became inflamed, and at the end of the week the ulcer was decidedly larger than previous to the application of the kreosote, and in consequence of the obvious injury done by the treatment it was abandoned.

Professor Wolff of Berlin tried the effects of injections of kreosote water into the vagina, in two cases of cancer of the uterus. In both instances, violent pain ensued, and one of the patients was obliged, on this account, after nine days, to refrain from employing it, and the other, after persevering in its use for twenty-six days, was compelled from a like cause to desist. In neither case was there any diminution of the secretion or of the metrorrhagia. One of the patients ex-

pired after violent metrorrhagia, but the other died more slowly.

During last summer I saw it tried in the clinical wards of the Surgical Hospital by Professor Syme, in a dreadful case of lupus. The fector of the discharge, which was before very great, seemed to be corrected, but besides this, there was apparently no good effect produced. The case, however, was so very bad, that no application could be expected to benefit it,—the articulation of the lower jaw being exposed on one side, and an immense surface involved in the disease.—

Edinburgh Med. and Surg. Journal, Oct. 1836.

50. Treatment of Hydrocele by Acupuncturation.—Mr. Lewis recommends puncturing hydrocele with a very fine needle, until a drop of fluid oozes out on withdrawing the instrument, and he says that in three days the hydrocele will completely disappear, no matter in what quantity the fluid may have been collected. Out of upwards of 50 cases treated by Dr. L. by this method, he says there has not been a single instance of failure, neither has there been any consecutive

inflammation.

"It may seem almost incredible," he says, "that a single puncture with the point of a fine needle into an encysted cavity, is sufficient to cause the absorption of the fluid contained therein, but such is the fact. I have punctured an enormous double hydrocele, complicated with rupture; the volume was so great that the penis could not be seen; yet by a single puncture on each side, in three days the fluid had entirely disappeared, and the parts had regained their original size. The simplicity of the operation is such, that I have seen medical men afflicted with hydrocele fearful of having it punctured (through want of confidence in the resources of nature,) lest it should prove a failure, without the aid of the trochar and canula.

"The principle of puncturing with a fine pointed needle is not only applicable to promote the absorption of the fluid in hydrocele, but in every case of encysted

dropsy. My worthy and talented friend, Dr. T. Davies, of Broad-street, has lately informed me that he had explored the chest with a grooved needle, in order to convince operating surgeons of the existence of fluid, previous to resorting to the operation of paracentesis thoracis. Having ascertained that fluid existed, he found, to his surprise, that the patients got well by means of the puncture, without having recourse to the usual operation; and so successful has he since been, that he never now employs any other method of emptying the cavity of its fluid. On the same principle the needle may be used with safety and success in many

cases of hydrocephalus, and, perhaps, in some tumours.

"In hydrocele the accumulation of water proceeds more slowly after puncturatien than after the more sudden emptying by the trochar and canula. Acupuncturation, as hitherto practised, both abroad and in this country, has been on the principle of counter-irritation, and as an agent to give discharge to the water in cellular dropsies. The acupuncturation needle is much larger and rougher than the one I use in the treatment of hydrocele by puncturation; in fact, the needle cannot be too fine, provided it be strong enough to penetrate through the integuments, for the smaller the puncture the less pain and inflammation ensue."-Lancet, 7 May, 1836, and 14 Jan. 1837.

The claims of originality of Mr. Lewis to this practice has been contested by several surgeons. Mr. Kingdom stated at a meeting of the London Medical Society, that he had employed the same means several years ago, and that it appears to have been the usual practice of a German surgeon who resided some

years ago in London.

Mr. Travers also in a letter in the London Medical Gazette, (Feb. 11, 1837,) claims the conception of the same plan, whilst Mr. Robert Keate, in a communication in the Journal just quoted, (Feb. 18, 1837) states, that the plan and the practice have been known and acted upon by himself, for very many years, and probably by others. By one other person, he adds, he knows that it was performed, perhaps 20 years ago. This person was a physician, and practised the operation on himself. "At his suggestion," says Mr. R., "I tried it frequently, both at the hospital and in private practice.

OPHTHALMOLOGY.

51. Treatment of gonorrheal ophthalmia. - M. Sanson having found antiphlogistics alone, ineffectual for the cure of gonorrheal ophthalmia, has adopted the following method of treatment:-He first bleeds to the extent of 24 to 30 ounces; if this is followed by marked benefit, he repeats the bleeding, and applies a great number of leeches around the orbits of the eyes. But if the ophthalmia instead of diminishing, remains stationary or gets worse, M. S. abandons antiphlogistics, and has recourse to excision and cauterization, which he employs in the following manner: The patient is laid upon a bed, and his head fixed on a pillow by an assistant; another assistant separates the lids and everts them. The surgeon seated in front of the patient, then seizes with dissecting forceps, the prominent patient of the couler conjunctions of the couler conjunctions and cauterization, which he employs in the prominent patients of the couler conjunctions and cauterization, which he employs in the prominent patients of the couler conjunction and cauterization, which he employs in the couler conjunction and cauterization, which he employs in the following manner: the prominent portions of the ocular conjunctiva, and excises with curved scissors, as completely as possible, all the swollen portions of this membrane as far as the point where it is reflected upon the globe of the eye. The blood is now allowed to flow; the parts are afterwards carefully washed and a pencil of nitrate of silver is then slowly passed over the whole external surface of both eyelids, which are kept everted. The parts are then carfully washed with water to remove all portions of caustic which not having combined with the tissues might act upon the cornea, and the lids are then replaced. The subsequent treatment consists in bleeding, pediluviæ, cold applications, &c. The pain which at first is extremely severe, is soon assnaged .- Journ. de Méd. et de Chirug. Prat., October, 1836.

^{52.} Amaurosis cured by electro-puncture. - Dr. Rosas in his report of the Ophthalmological clinic of Vienna, during the session of 1832-3, gives an interesting case of complete amaurosis, occurring in a tanner 47 years of age, of 16 years duration,